RAW SEQUENCE LISTING   DATE: 10/26/2001
PATENT APPLICATION: US/09/857,669   TIME: 16:22:19

Input Set : A:\seqlist.txt
Output Set: N:\CRF3\10262001\I857669.raw

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    6 <120> TITLE OF INVENTION: Polypeptides and Polynucleotides
    7       "BASB040" From Neisseria Meningitidis and Vaccine Comprising
    8       Said Polypeptides and Polynucleotides
   11 <130> FILE REFERENCE: BM45339
   13 <140> CURRENT APPLICATION NUMBER: 09/857,669
C--> 14 <141> CURRENT FILING DATE: 2001-09-21
   16 <150> PRIOR APPLICATION NUMBER: 9826886.5
   17 <151> PRIOR FILING DATE: 1998-12-07
   19 <150> PRIOR APPLICATION NUMBER: PCT/EP99/09560
   20 <151> PRIOR FILING DATE: 1999-12-02
   22 <160> NUMBER OF SEQ ID NOS: 11
   24 <170> SOFTWARE: FastSEQ for Windows Version 4.0
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   28 <212> TYPE: DNA
   29 <213> ORGANISM: Neisseria meningitidis
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   34 agccccgaca ccgaatcagt taaattaaaa cccaaattcc ccgtccgcat cgacacgcag     180
   35 gatagtgaaa tcaaagatat ggtcgaagaa cacctgccgc tcatcacgca gcagcaggaa     240
   36 gaagtattgg acaaggaaca gacgggcttc ctcgccgaag aagcaccgga caacgttaaa     300
   37 accatgctcc gcagcaaagg ctatttcagc agcaaagtca gcctgacgga aaaagacgga     360
   38 gcttatcgg tacacatcac accgggcccg cgcaccaaaa tcgccaacgt cggtgtcgcc     420
   39 atcctcggcg acatcctttc agacggcaac ctcgccgaat actaccgcaa cgcgctggaa     480
   40 aactggcagc agccggtagg cagtgatttc gatcaggaca gttgggaaaa cagcaaaact     540
   41 tccgtcctcg gcgcggtaac gcgaaaaggc tacccgcttg ccaagctcgg caacacccgg     600
   42 gcggccgtca accccgatac cgccaccgtc gatttgaacg tcgtcgtgga cagcggccgc     660
   43 cccatcgcct tcggcgactt tgaaatcacc ggcacacagc gttaccccga caaatcgtc     720
   44 tccggcctgg cgcgcttcca accgggcacg ccctacgacc tcgacctgct gctcgacttc     780
   45 caacaggcac tcgaacaaaa cgggcattat tccggcgcgt ccgtacaagc cgacttcgac     840
   46 cgtctccaag gcgaccgcgt ccccgtcaaa gtcagcgtaa ccgaggtcaa acgccacaag     900
   47 ctcgaaaccg gcatccgcct cgattcggaa tacggtttgg gcggcaaaat cgcctacgac     960
   48 tattacaacc tcttcaacaa aggctatatc ggctcggtcg tctgggatat ggacaaatac    1020
   49 gaaaccacgc ttgccgccgg catcagccag ccgcgcaact atcggggcaa ctactggaca    1080
   50 agcaacgttt cctacaaccg ttcgaccacc caaaacctcg aaaaacgcgc cttctccggc    1140
   51 ggcatctggt atgtgcgcga ccgcgcgggc atcgatgcca ggctggggc agagtttctc    1200
   52 gcagaaggcc ggaaaatccc cggctcggat atcgatttgg caacagcca cgccacgatg    1260
   53 ctgaccgcct cttggaaacg ccagctgctc aacaacgtgc tgcatcccga aaacggccat    1320
   54 tacctcgacg gcaaaatcgg tacgactttg ggcacattcc tgtcctccac cgcgctgatc    1380
   55 cgcacctctg cccgtgcagg ttatttcttc acgcccgaaa caaaaaaact cggcacgttc    1440
   56 atcatacgcg gacaagcggg ttacaccgtt gcccgcgaca atgccgacgt ccttcaggg    1500
   57 ctgatgttcc gcagcggcgg cgcgtcttcc gtgcgcggtt acgaactcga cagcatcgga    1560
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61 agcccgcttg cgccgttttc cttcgacatc gcctacgggc acagcgataa gaaaatccgc    1800
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65 <211> LENGTH: 609
66 <212> TYPE: PRT
67 <213> ORGANISM: Neisseria meningitidis
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72 Pro His Ala Tyr Ala Pro Ala Ala Asp Leu Ser Glu Asn Lys Ala Ala
73              20                  25                  30
74 Gly Phe Ala Leu Phe Lys Asn Lys Ser Pro Asp Thr Glu Ser Val Lys
75          35                  40                  45
76 Leu Lys Pro Lys Phe Pro Val Arg Ile Asp Thr Gln Asp Ser Glu Ile
77      50                  55                  60
78 Lys Asp Met Val Glu Glu His Leu Pro Leu Ile Thr Gln Gln Gln Glu
79 65                  70                  75                  80
80 Glu Val Leu Asp Lys Glu Gln Thr Gly Phe Leu Ala Glu Glu Ala Pro
81              85                  90                  95
82 Asp Asn Val Lys Thr Met Leu Arg Ser Lys Gly Tyr Phe Ser Ser Lys
83              100                 105                 110
84 Val Ser Leu Thr Glu Lys Asp Gly Ala Tyr Thr Val His Ile Thr Pro
85          115                 120                 125
86 Gly Pro Arg Thr Lys Ile Ala Asn Val Gly Val Ala Ile Leu Gly Asp
87      130                 135                 140
88 Ile Leu Ser Asp Gly Asn Leu Ala Glu Tyr Tyr Arg Asn Ala Leu Glu
89 145                 150                 155                 160
90 Asn Trp Gln Gln Pro Val Gly Ser Asp Phe Asp Gln Asp Ser Trp Glu
91              165                 170                 175
92 Asn Ser Lys Thr Ser Val Leu Gly Ala Val Thr Arg Lys Gly Tyr Pro
93              180                 185                 190
94 Leu Ala Lys Leu Gly Asn Thr Arg Ala Ala Val Asn Pro Asp Thr Ala
95          195                 200                 205
96 Thr Val Asp Leu Asn Val Val Asp Ser Gly Arg Pro Ile Ala Phe
97      210                 215                 220
98 Gly Asp Phe Glu Ile Thr Gly Thr Gln Arg Tyr Pro Glu Gln Ile Val
99 225                 230                 235                 240
100 Ser Gly Leu Ala Arg Phe Gln Pro Gly Thr Pro Tyr Asp Leu Asp Leu
101                 245                 250                 255
102 Leu Leu Asp Phe Gln Gln Ala Leu Glu Gln Asn Gly His Tyr Ser Gly
103                 260                 265                 270
104 Ala Ser Val Gln Ala Asp Phe Asp Arg Leu Gln Gly Asp Arg Val Pro
105                 275                 280                 285
106 Val Lys Val Ser Val Thr Glu Val Lys Arg His Lys Leu Glu Thr Gly
107          290                 295                 300
108 Ile Arg Leu Asp Ser Glu Tyr Gly Leu Gly Gly Lys Ile Ala Tyr Asp
109 305                 310                 315                 320
110 Tyr Tyr Asn Leu Phe Asn Lys Gly Tyr Ile Gly Ser Val Val Trp Asp
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RAW SEQUENCE LISTING   DATE: 10/26/2001
PATENT APPLICATION: US/09/857,669   TIME: 16:22:20

Input Set : A:\seqlist.txt
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115         355             360             365
116 Thr Thr Gln Asn Leu Glu Lys Arg Ala Phe Ser Gly Gly Ile Trp Tyr
117     370             375             380
118 Val Arg Asp Arg Ala Gly Ile Asp Ala Arg Leu Gly Ala Glu Phe Leu
119 385             390             395             400
120 Ala Glu Gly Arg Lys Ile Pro Gly Ser Asp Ile Asp Leu Gly Asn Ser
121         405             410             415
122 His Ala Thr Met Leu Thr Ala Ser Trp Lys Arg Gln Leu Leu Asn Asn
123         420             425             430
124 Val Leu His Pro Glu Asn Gly His Tyr Leu Asp Gly Lys Ile Gly Thr
125         435             440             445
126 Thr Leu Gly Thr Phe Leu Ser Ser Thr Ala Leu Ile Arg Thr Ser Ala
127     450             455             460
128 Arg Ala Gly Tyr Phe Phe Thr Pro Glu Asn Lys Lys Leu Gly Thr Phe
129 465             470             475             480
130 Ile Ile Arg Gly Gln Ala Gly Tyr Thr Val Ala Arg Asp Asn Ala Asp
131         485             490             495
132 Val Pro Ser Gly Leu Met Phe Arg Ser Gly Gly Ala Ser Ser Val Arg
133         500             505             510
134 Gly Tyr Glu Leu Asp Ser Ile Gly Leu Ala Gly Pro Asn Gly Ser Val
135     515             520             525
136 Leu Pro Glu Arg Ala Leu Leu Val Gly Ser Leu Glu Tyr Gln Leu Pro
137     530             535             540
138 Phe Thr Arg Thr Leu Ser Gly Ala Val Phe His Asp Met Gly Asp Ala
139 545             550             555             560
140 Ala Ala Asn Phe Lys Arg Met Lys Leu Lys His Gly Ser Gly Leu Gly
141         565             570             575
142 Val Arg Trp Phe Ser Pro Leu Ala Pro Phe Ser Phe Asp Ile Ala Tyr
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146 Phe
149 <210> SEQ ID NO: 3
150 <211> LENGTH: 1830
151 <212> TYPE: DNA
152 <213> ORGANISM: Neisseria meningitidis
154 <400> SEQUENCE: 3
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157 agccccgaca ccgaatcagt taaattaaaa cccaaattcc ccgtccgcat cgacacgcag    180
158 gatagtgaaa tcaaagatat ggtcgaagaa cacctgccgc tcatcacgca gcagcaggaa    240
159 gaagtattgg acaaggaaca gacgggcttc ctcgccgaag aagcaccgga caacgttaaa    300
160 accatgctcc gcagcaaagg ctatttcagc agcaaagtca gcctgacgga aaaagacgga    360
161 gcttatacgg tacacatcac accgggcccg cgcaccaaaa tcgccaacgt cggtgtcgcc    420
162 atcctcggcg acatcctttc agacggcaac ctcgccgaat actaccgcaa cgcgctggaa    480
163 aactggcagc agccggtagg cagtgatttc gatcaggaca gttgggaaaa cagcaaaact    540
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166 cccatcgcct tcggcgactt tgaaatcacc ggcacacagc gttaccccga caaaatcgtc     720
167 tccggcctgg cgcgcttcca accgggcacg ccctacgacc tcgacctgct gctcgacttc     780
168 caacaggcac tcgaacaaaa cgggcattat tccggcgcgt ccgtacaagc cgacttcgac     840
169 cgtctccaag gcgaccgcgt ccccgtcaaa gtcagcgtaa ccgaggtcaa acgccacaag     900
170 ctcgaaaccg gcatccgcct cgattcggaa tacggtttgg cggcaaaat cgcctacgac      960
171 tattacaacc tcttcaacaa aggctatatc ggctcggtcg tctgggatat ggacaaatac    1020
172 gaaaccacgc ttgccgccgg catcagccag ccgcgcaact atcggggcaa ctactggaca    1080
173 agcaacgttt cctacaaccg ttcgaccacc caaaacctcg aaaaacgcgc cttctccggc    1140
174 ggcatctggt atgtgcgcga ccgcgcgggc atcgatgcca ggctggggc agagtttctc     1200
175 gcagaaggcc ggaaaatccc cggctcggat atcgatttgg caacagcca cgccacgatg      1260
176 ctgaccgcct cttggaaacg ccagctgctc aacaacgtgc tgcatcccga aaacggccat    1320
177 tacctcgacg gcaaaatcgg tacgactttg ggcacattcc tgtcctccac cgcgctgatc    1380
178 cgcacctctg cccgtgcagg ttatttcttc acgcccgaaa acaaaaaact cggcacgttc    1440
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181 cttgccggcc cgaacggatc ggtcctgccc gaacgcgccc tcctggtggg cagcctggaa    1620
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183 gccgccaatt tcaaacgtat gaagctgaaa cacggttcgg gactgggcgt gcgctggttc    1740
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188 <211> LENGTH: 609
189 <212> TYPE: PRT
190 <213> ORGANISM: Neisseria meningitidis
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195 Pro His Ala Tyr Ala Pro Ala Ala Asp Leu Ser Glu Asn Lys Ala Ala
196             20                  25                  30
197 Gly Phe Ala Leu Phe Lys Asn Lys Ser Pro Asp Thr Glu Ser Val Lys
198         35                  40                  45
199 Leu Lys Pro Lys Phe Pro Val Arg Ile Asp Thr Gln Asp Ser Glu Ile
200     50                  55                  60
201 Lys Asp Met Val Glu Glu His Leu Pro Leu Ile Thr Gln Gln Gln Glu
202 65                  70                  75                  80
203 Glu Val Leu Asp Lys Glu Gln Thr Gly Phe Leu Ala Glu Glu Ala Pro
204             85                  90                  95
205 Asp Asn Val Lys Thr Met Leu Arg Ser Lys Gly Tyr Phe Ser Ser Lys
206             100                 105                 110
207 Val Ser Leu Thr Glu Lys Asp Gly Ala Tyr Thr Val His Ile Thr Pro
208         115                 120                 125
209 Gly Pro Arg Thr Lys Ile Ala Asn Val Gly Val Ala Ile Leu Gly Asp
210     130                 135                 140
211 Ile Leu Ser Asp Gly Asn Leu Ala Glu Tyr Tyr Arg Asn Ala Leu Glu
212 145                 150                 155                 160
213 Asn Trp Gln Gln Pro Val Gly Ser Asp Phe Asp Gln Asp Ser Trp Glu
214             165                 170                 175
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215 Asn Ser Lys Thr Ser Val Leu Gly Ala Val Thr Arg Lys Gly Tyr Pro
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217 Leu Ala Lys Leu Gly Asn Thr Arg Ala Ala Val Asn Pro Asp Thr Ala
218         195                 200             205
219 Thr Val Asp Leu Asn Val Val Val Asp Ser Gly Arg Pro Ile Ala Phe
220     210                 215             220
221 Gly Asp Phe Glu Ile Thr Gly Thr Gln Arg Tyr Pro Glu Gln Ile Val
222 225             230                 235                 240
223 Ser Gly Leu Ala Arg Phe Gln Pro Gly Thr Pro Tyr Asp Leu Asp Leu
224             245                 250                 255
225 Leu Leu Asp Phe Gln Gln Ala Leu Glu Gln Asn Gly His Tyr Ser Gly
226             260                 265                 270
227 Ala Ser Val Gln Ala Asp Phe Asp Arg Leu Gln Gly Asp Arg Val Pro
228         275                 280             285
229 Val Lys Val Ser Val Thr Glu Val Lys Arg His Lys Leu Glu Thr Gly
230     290                 295             300
231 Ile Arg Leu Asp Ser Glu Tyr Gly Leu Gly Gly Lys Ile Ala Tyr Asp
232 305             310                 315                 320
233 Tyr Tyr Asn Leu Phe Asn Lys Gly Tyr Ile Gly Ser Val Val Trp Asp
234             325                 330                 335
235 Met Asp Lys Tyr Glu Thr Thr Leu Ala Ala Gly Ile Ser Gln Pro Arg
236             340                 345                 350
237 Asn Tyr Arg Gly Asn Tyr Trp Thr Ser Asn Val Ser Tyr Asn Arg Ser
238             355                 360                 365
239 Thr Thr Gln Asn Leu Glu Lys Arg Ala Phe Ser Gly Gly Ile Trp Tyr
240     370                 375                 380
241 Val Arg Asp Arg Ala Gly Ile Asp Ala Arg Leu Gly Ala Glu Phe Leu
242 385             390                 395                 400
243 Ala Glu Gly Arg Lys Ile Pro Gly Ser Asp Ile Asp Leu Gly Asn Ser
244             405                 410                 415
245 His Ala Thr Met Leu Thr Ala Ser Trp Lys Arg Gln Leu Leu Asn Asn
246             420                 425                 430
247 Val Leu His Pro Glu Asn Gly His Tyr Leu Asp Gly Lys Ile Gly Thr
248         435                 440             445
249 Thr Leu Gly Thr Phe Leu Ser Ser Thr Ala Leu Ile Arg Thr Ser Ala
250     450                 455                 460
251 Arg Ala Gly Tyr Phe Phe Thr Pro Glu Asn Lys Lys Leu Gly Thr Phe
252 465             470                 475                 480
253 Ile Ile Arg Gly Gln Ala Gly Tyr Thr Val Ala Arg Asp Asn Ala Asp
254             485                 490                 495
255 Val Pro Ser Gly Leu Met Phe Arg Ser Gly Gly Ala Ser Ser Val Arg
256             500                 505                 510
257 Gly Tyr Glu Leu Asp Ser Ile Gly Leu Ala Gly Pro Asn Gly Ser Val
258     515                 520                 525
259 Leu Pro Glu Arg Ala Leu Leu Val Gly Ser Leu Glu Tyr Gln Leu Pro
260     530                 535                 540
261 Phe Thr Arg Thr Leu Ser Gly Ala Val Phe His Asp Met Gly Asp Ala
262 545             550                 555             560
263 Ala Ala Asn Phe Lys Arg Met Lys Leu Lys His Gly Ser Gly Leu Gly
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VERIFICATION SUMMARY
PATENT APPLICATION: US/09/857,669

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TIME: 16:22:21

Input Set : **A:\seqlist.txt**
Output Set: **N:\CRF3\10262001\I857669.raw**

L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date